

INTERNATIONAL SEARCH REPORT

Rec'd EPO

23 MAR 2004

Inventor's Application No.

PCT/JP03/04189

10/528935

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G11B20/12 G11B27/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 831 647 A (MATSUSHITA ELECTRIC IND CO LTD) 25 March 1998 (1998-03-25) abstract column 1, line 5 -column 2, line 42 column 9, line 45 -column 11, line 30 column 16, line 18 -column 19, line 46 figures 3,4	1-10
A	EP 0 677 961 A (TOSHIBA AVE KK; TOKYO SHIBAURA ELECTRIC CO (JP)) 18 October 1995 (1995-10-18) abstract column 1, line 1 -column 2, line 53 column 12, line 57 -column 14, line 12 column 15, line 56 -column 17, line 34 figures 2-5 -/-	1-10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

2 February 2004

Date of mailing of the international search report

11/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Sucher, R

INTERNATIONAL SEARCH REPORT

Int. Application No.
PCT/03/04189

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 229 542 A (SAMSUNG ELECTRONICS CO LTD) 7 August 2002 (2002-08-07) abstract paragraph '0001! - paragraph '0003! paragraph '0036! - paragraph '0064! -----	1,8,10

INTERNATIONAL SEARCH REPORT

Int. Application No
PCT/JP03/04189

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0831647	A	25-03-1998	DE 69710279 D1	21-03-2002
			DE 69710279 T2	27-06-2002
			EP 0831647 A1	25-03-1998
			HK 1009032 A1	31-05-2002
			JP 3379961 B2	24-02-2003
			CN 1194753 A , B	30-09-1998
			EP 1152413 A2	07-11-2001
			ID 16807 A	13-11-1997
			WO 9738527 A1	16-10-1997
			JP 3356769 B2	16-12-2002
			JP 2002208257 A	26-07-2002
			JP 3356770 B2	16-12-2002
			JP 2002245753 A	30-08-2002
			US 6088507 A	11-07-2000
EP 0677961	A	18-10-1995	JP 2945842 B2	06-09-1999
			JP 7334938 A	22-12-1995
			DE 69516935 D1	21-06-2000
			DE 69516935 T2	19-10-2000
			DE 69518336 D1	14-09-2000
			EP 0677961 A2	18-10-1995
			EP 0812108 A2	10-12-1997
			HK 1005115 A1	12-01-2001
EP 1229542	A	07-08-2002	JP 11086456 A	30-03-1999
			KR 2002065039 A	13-08-2002
			BR 0106385 A	01-10-2002
			CN 1368732 A	11-09-2002
			EP 1229542 A2	07-08-2002
			JP 2002237170 A	23-08-2002
			US 2002106193 A1	08-08-2002